

Message

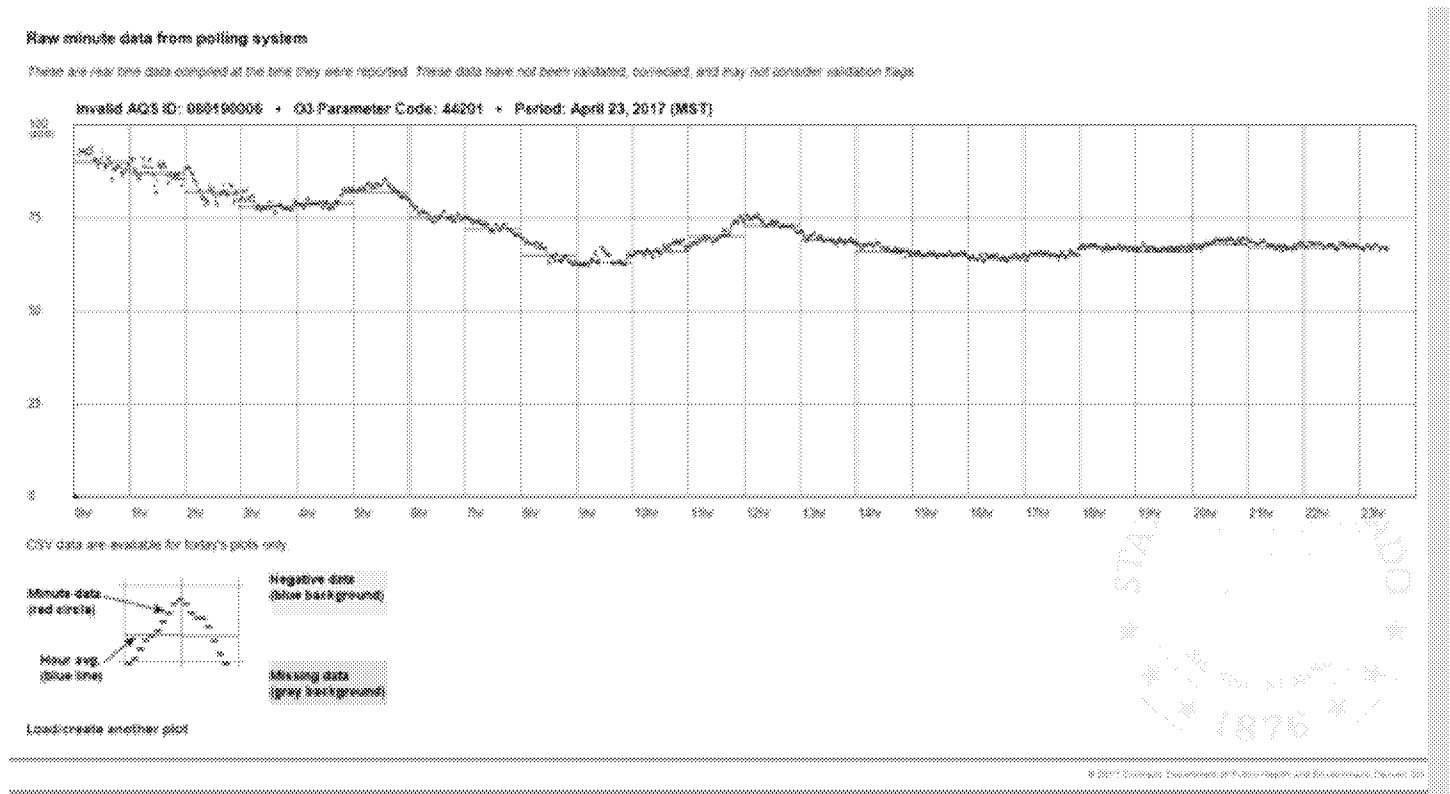
**From:** Landes - CDPHE, Scott [scott.landes@state.co.us]  
**Sent:** 4/24/2017 6:01:01 PM  
**To:** Tonnesen, Gail [Tonnesen.Gail@epa.gov]  
**CC:** Irina Petropavlovskikh - NOAA Affiliate [irina.petro@noaa.gov]; Owen Cooper - NOAA Affiliate [owen.r.cooper@noaa.gov]; Audra McClure [audra.mcclure@noaa.gov]; Andrew Langford [andrew.o.langford@noaa.gov]; dan.welsh@state.co.us; amber.ortega@state.co.us; Gordon Pierce [gordon.pierce@state.co.us]; Kevin Briggs [kevin.briggs@state.co.us]; Payton, Richard [Payton.Richard@epa.gov]  
**Subject:** Re: Huge enhancement of ozone at Niwot Ridge and Tundra lab

Hi all,

Yes, we had a major stratospheric intrusion this past weekend. We issued three separate advisories -- two on Saturday for central and western parts of Colorado and then one for the northern Front Range mountains on Sunday.

High elevation monitors in central and western parts of the state got hit first on Saturday. I haven't sorted through the numbers yet but I believe we had exceedances in Aspen, Gothic and Mesa Verde -- along with the monitors at the Southern Ute reservation. The Southern Ute exceedances were likely again due to a mixture of stratospheric air and anthropogenic sources.

On Sunday we also saw some big numbers, particularly at our high elevation Mines Peak monitor which also approached 100 ppb shortly after midnight Saturday night:



On Mon, Apr 24, 2017 at 11:52 AM, Tonnesen, Gail <Tonnesen.Gail@epa.gov> wrote:

Irina -- is the start date on your plots local time or GMT? Also, I cc'd CDPHE.

thanks,

Gail

**From:** Irina Petropavlovskikh - NOAA Affiliate [mailto:[irina.petro@noaa.gov](mailto:irina.petro@noaa.gov)]

**Sent:** Monday, April 24, 2017 11:09 AM

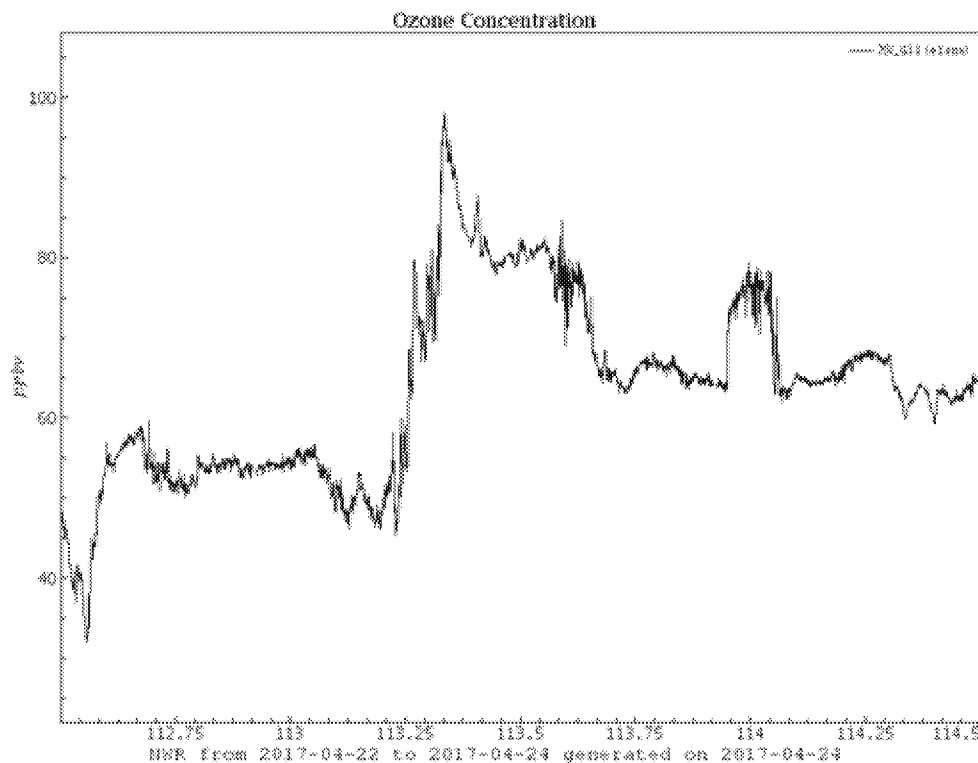
**To:** Tonnesen, Gail <[Tonnesen.Gail@epa.gov](mailto:Tonnesen.Gail@epa.gov)>; Owen Cooper - NOAA Affiliate <[owen.r.cooper@noaa.gov](mailto:owen.r.cooper@noaa.gov)>; Audra McClure <[audra.mcclure@noaa.gov](mailto:audra.mcclure@noaa.gov)>; Andrew Langford <[andrew.o.langford@noaa.gov](mailto:andrew.o.langford@noaa.gov)>

**Subject:** Huge enhancement of ozone at Niwot Ridge and Tundra lab

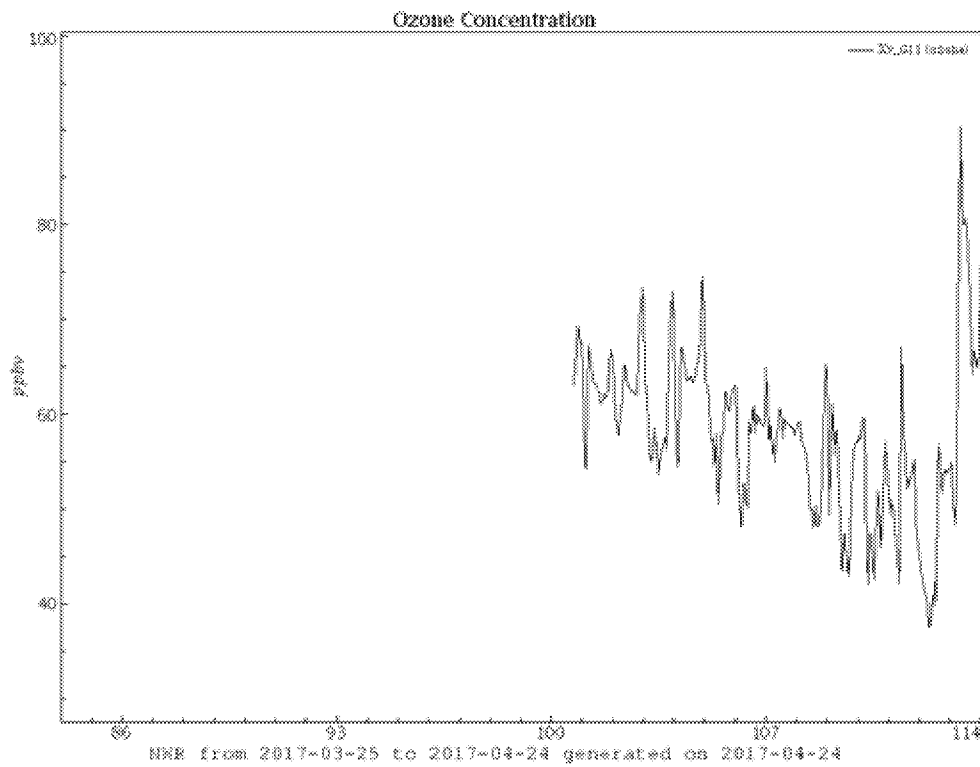
Hi

I can not believe it

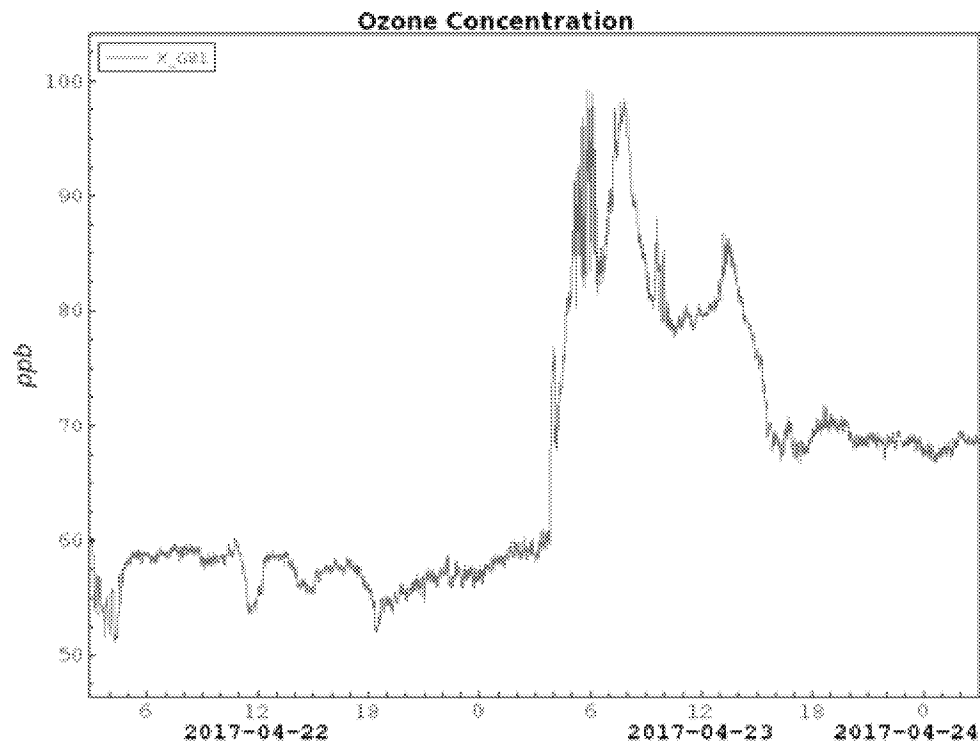
There is a very large enhancement in ozone at Niwot ridge observed yesterday (48 hour plot)

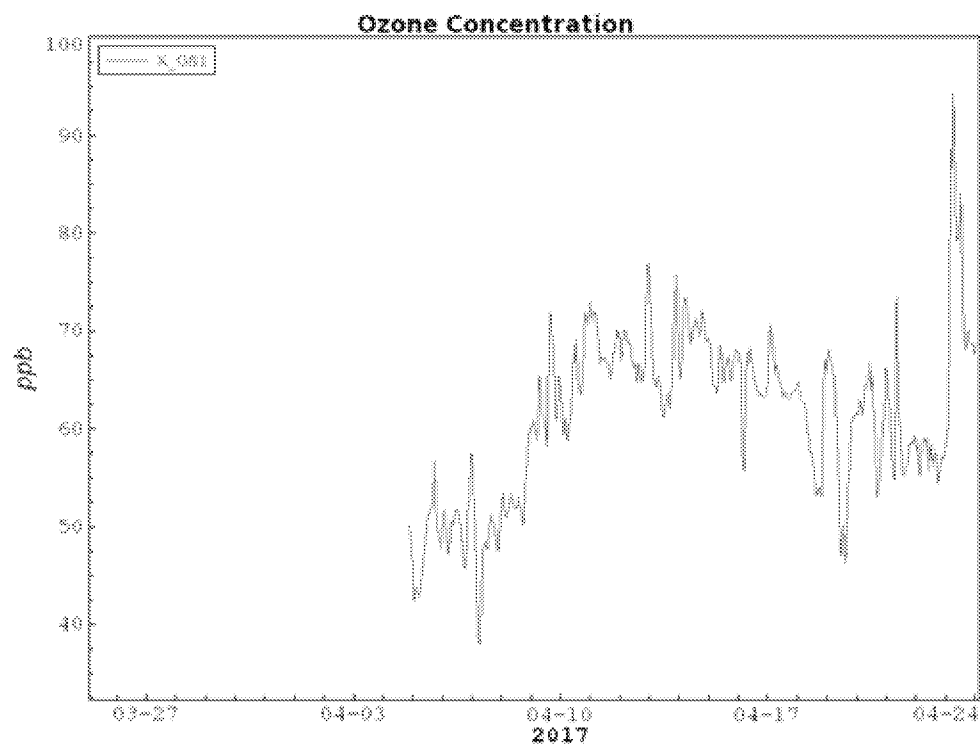


Here is a 2 week plot

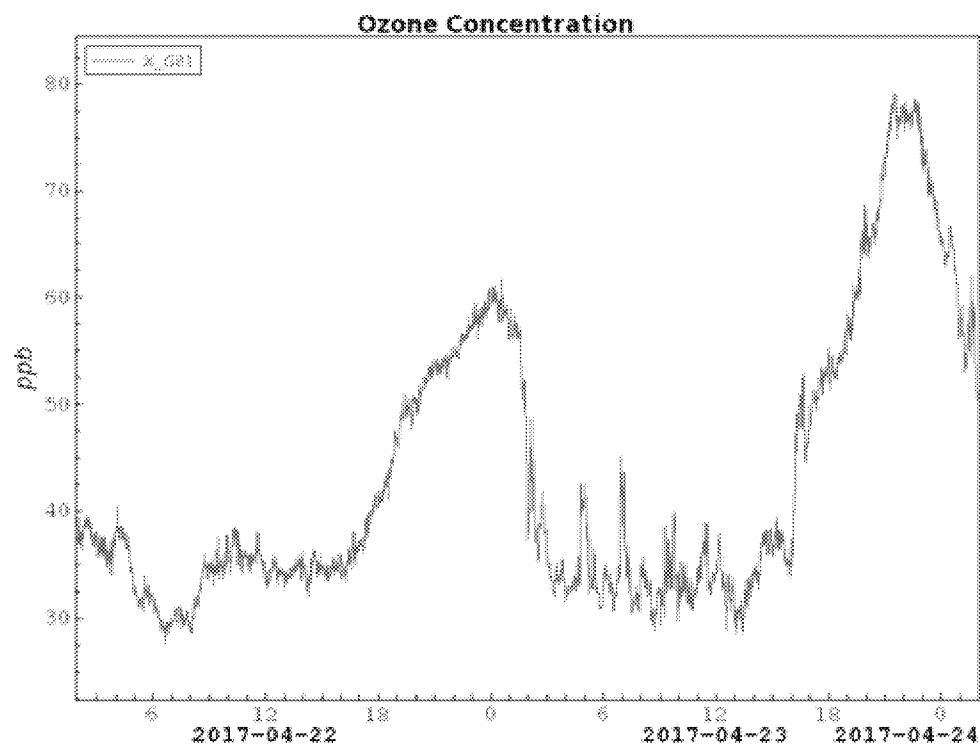


The same elevated ozone was observed at Tundra





It was enhanced over Table Mountain station by yesterday afternoon .



It seems that the mountain stations observed it first and then it was observed at the foothills

Regards,

Irina

--  
Dr. Irina Petropavlovskikh  
Ozone and Water Vapor Group Chief  
NOAA ESRL Global Monitoring Division  
325 Broadway R/GMD  
Boulder, CO, 80305-3328  
phone: 303-497-6279  
fax: 303-497-5590

--  
**Scott J Landes**  
**Supervisor/Air Quality Meteorologist**  
**Meteorology and Prescribed Fire Unit**  
**Technical Services Program**



303-692-3255  
[scott.landes@state.co.us](mailto:scott.landes@state.co.us)